

ABSTRACT

A drive chain is made up of links injection molded of fiber-reinforced nonmetallic material. The chain links feature pivot bearings molded integrally to the links, which take all loads due to drive tension and relieve the connecting pins of all shear stress. The links also have all features for attachment to driven components molded integrally. The moving structural parts are separated by nonmetallic bushings filled with solid lubricating additives to reduce friction and wear. The chain rollers may also incorporate metallic ball bearings to reduce friction drag on guide track.